

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP PROGRAM
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

PROJECT INFORMATION

Project Title: Pinyon Mountain Catchment Redevelopment

Project No. 09-610

Region/GMU: Region VI/ GMU 24B

HPC: Payson Natural Resource Committee

Project Type: Water Catchment Redevelopment

Project Description:

The purpose of the Pinyon Mountain Catchment Renovation would be fourfold:

First: Replace the existing partially-functioning collection apron and storage tanks with a fully functioning, low maintenance collection apron and a larger capacity water storage system with little or no loss of water due to evaporation.

Second: Construct a wildlife drinker at the catchment site and refurbish an existing drinker down slope from the catchment.

Third: Replace an existing livestock drinker with wildlife-friendly drinker

Fourth: Provide dependable water sources for a variety of wildlife species in the vicinity of Pinyon Mountain.

Wildlife Species to Benefit: Whitetail Deer, Mule Deer, Javelina, and various small game and nongame species

Possible Funding Partners:

Implementation Schedule:

Beginning: January 1, 2010

Completed: January 1, 2012

NEPA Compliance: (if applicable)

Completed: Yes X No _____

Projected Completion Date:

PROJECT FUNDING

SBG Funds Requested: \$ 29,755

Cost Share Funds: \$ 36,160

Total Project Costs: \$ 65,915

PARTICIPANT INFORMATION

Applicant: Dana McGehee

(please print)

Telephone: 480-203-2465 (office)

480-710-5574 (cell)

Address:

7200 East University

Mesa, AZ 85207

AGFD Contact and Phone No. Dana McGehee 480-710-5574 (If applicant is not AGFD personnel)	
Coordinated with: Joseph Currie, AZ Game and Fish Dept. Shannon Torrence, Wildlife Biologist, Tonto Basin Ranger District, Tonto NF	Date: June, 2009
Applicant's signature:	Date: Sept 1, 2009

SEND COMPLETED APPLICATIONS TO:

**Game Branch
Arizona Game and Fish Department
5000 W. Carefree Highway
Phoenix, AZ 85086
rthompson@azgfd.gov**

WAS PROJECT PRESENTED TO THE LOCAL HPC? YES X NO

HAS PROJECT BEEN SUBMITTED IN PREVIOUS YEARS? IF SO WAS IT FUNDED?
No

NEED STATEMENT/PROBLEM ANALYSIS:

The Pinyon Mountain area is located within GMU 24B south of Roosevelt Lake. Pinyon Mountain itself is 5200+ feet in elevation, with surrounding areas descending to about 2800 feet. Habitat types are primarily interior chaparral and upland Sonoran desert and utilized by such game species as whitetail deer, mule deer, javelina, mountain lion, Gambel's quail, and cottontail, as well as a variety of nongame species.

During the 1980's and early 1990's, this area provided significant big game hunting opportunity for both species of deer and for javelina. Mule deer were abundant at lower and higher elevations, and whitetail were abundant throughout elevations above 3500 feet. Javelina were dispersed throughout all portions of the area. A major contributing factor to this was the abundance of dependable natural and man-made water sources due to consistent and favorable precipitation patterns during that time.

More recent precipitation patterns have reduced naturally occurring water sources, and in many portions of the area livestock waters are the primary source of water. This has contributed to greatly reduced mule deer numbers, as well as limited areas for whitetail and javelina.

The Pinyon Mountain Catchment is part of a water collection and delivery system constructed and maintained by livestock permittees on the Schoolhouse and Roosevelt Allotments within the Tonto National Forest. The primary purpose of the system is to provide livestock waters on pastures within these two allotments, but water is also utilized by wildlife when available. Livestock drinkers that are part of the system may or may not provide water for wildlife depending upon the presence of livestock within particular pastures. The drinkers are turned on according to livestock usage and pasture rotations.

The Pinyon Mountain catchment is currently in a state of disrepair and is essentially non-functional. Some of the apron sheeting is missing, and portions of it are loose and coming off. Many sheets are simply held in place by weighting down with rocks. Much of the underlying wooden framework is broken or beginning to

decay. The steel storage tanks are rusting and their future integrities are questionable. The storage system is not covered and, as a result, water is lost to evaporation. (Refer to attached photos)

The current system is designed and maintained to collect rainfall water in the lower storage tank, store it, and deliver it to several livestock drinkers down slope from the catchment. Since the collection apron is essentially non-functional, it is no longer in use. Water for livestock is now pumped up to storage tanks via the existing pipeline system and is distributed as needed for livestock. The upper storage tank requires that water be pumped to it.

The new catchment will reduce the need to pump water up to either of the storage tanks. Since the new catchment will be constructed by the Department, water will be delivered to selected livestock drinkers on a year-round basis for use by wildlife with little or no expense to the permittee. The proposed new catchment will provide an efficient means of collection and storage. The collection apron will be constructed to Department standards using materials with greater longevity. The storage tanks will be constructed to Department standards as well, and will be covered to prevent loss to evaporation.

In addition, a wildlife drinker will be installed near the collection site, and an existing livestock drinker down slope will be replaced with a trough that is wildlife compatible.

PROJECT OBJECTIVES:

- Create and maintain dependable water sources for a variety of wildlife species found within the Pinyon Mountain vicinity
- Increase numbers of mule deer, whitetail deer and javelina by creating and maintaining dispersed, dependable water sources
- Increase hunter opportunity
- Use recent catchment technology to maximize water collection and storage.
- Use recent catchment technology to construct a system requiring minimal routine maintenance
- Combine existing livestock watering system with components to provide water for wildlife
- Increase the availability of year-round water sources for wildlife

PROJECT STRATEGIES:

- Completely redevelop existing catchment while staying in established footprint
- Replace old livestock trough with wildlife-friendly trough
- Install walk-in wildlife drinker at catchment
- Utilize big game special tag funds, matching funds, AGFD personnel, ranch personnel

PROJECT LOCATION:

The catchment is located within the Tonto National Forest in Game Management Unit 24B; T3N,R12E, Sec16 (33°35.819N/111°8.22W). Refer to attached map.

LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name):

USFS – Tonto National Forest, Tonto Basin Ranger district

IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?

HABITAT DESCRIPTION:

Arizona upland Sonoran desert, interior chaparral, semi-desert grassland; elevation 2800-5200 feet

ITEMIZED USE OF FUNDS:

COOPERATOR AND PROJECT COMPONENT	COST-SHARE DOLLARS AVAILABLE	SBG FUNDS REQUESTED
Arizona Game and Fish Department (SBG Funds) <ul style="list-style-type: none"> Provide reimbursement for construction of new catchment, walk-in drinker, wildlife-friendly drinker 		\$ 29,755
Arizona Game and Fish Department <ul style="list-style-type: none"> Provide in-kind labor to write proposal, coordinate project, and complete report. Calculated as three days @ \$240/day. 	\$ 720	
USDA – Tonto National Forest, Tonto Basin Ranger District <ul style="list-style-type: none"> Provided administrative support including labor/funding to produce NEPA and archaeological clearances and field inspections prior to catchment replacement. 	\$ 2,000	
Black Brush Ranch <ul style="list-style-type: none"> Provided NRCS funding, labor, and equipment to operate and maintain water delivery system 	\$ 8,440	
Arizona Game and Fish Department (Hunter Donation Fund)	\$ 5,000	
Arizona Game and Fish Department (Development Branch) <ul style="list-style-type: none"> Project labor 	\$ 20,000	
Totals:	\$ 36,160	\$ 29,755

Total Project Cost: \$65,915
Ratio Of Cost-Share Dollars : SBG Funds = 1.2 : 1

MATERIALS AND PRICES

- 2 – 18' diameter Ring Tanks \$ 19,845
- 1 – 3' x 4' Walk-in Trough \$ 3,270
- 1 – 24' x 96' Apron \$ 6,245
- Pipe-rail Fence (150x150) \$ 3,500
- Drinker trough (wildlife friendly) \$ 895
- Misc. materials & plumbing \$ 1,000
- Total materials: **\$ 34,755**

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

- AGFD Development Branch: acquire materials, provide equipment and some labor for construction
- Tonto National Forest: assure NEPA compliance and Arch clearances (already completed due to existing footprint)
- Perry Basset (livestock permittee, Black Brush Limited Partnership): project support, additional labor and contracting
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PROJECT MONITORING PLAN:

The Wildlife Manager will monitor the project throughout by coordinating with the AGFD personnel who will be doing the planning, purchasing and installing as well doing periodic site visits. Upon completion of the project, the Wildlife Manager will make periodic inspections of the catchment and designated drinkers to ensure the system is functioning properly.

PROJECT MAINTENANCE:

- The maintenance of the catchment will be the responsibility of the AGFD. The wildlife manager will be responsible for coordinating this.
- The livestock permittee will maintain pipelines and drinkers below the catchment

PROJECT COMPLETION REPORT TO BE FILED BY:

Joe Currie, AGFD

Dana McGehee, AGFD

WATER DEVELOPMENT PROJECTS (see attached worksheet):

WATER DEVELOPMENT WORKSHEET

PROJECT NAME: Pinyon Mountain Catchment Redevelopment

- 1) **Is the water development listed as a priority in the most recent "Wildlife Water Development Annual Implementation Schedule?"**
No
- 2) **Please list the Development Branch personnel and date coordinated with for this project.**
Joseph Currie, Spring and summer of 2009.
- 3) **What is the estimated annual inches of precipitation for the area? (mark one)**
___2-4 ___4-6 ___6-8 ___8-10 ___10-12 ___12-14 ___14-16 ___X___>16 (At catchment site, less precipitation at lower elevations utilized by wildlife)
- 4) **Is there a perennial water source available to big game within four miles of this project?**
___X___ YES (please complete #5 below) ___NO (skip #5 below)
- 5) **For the accessible, perennial water source nearest this project:**
Cottonwood Spring in Cottonwood Canyon – 3.5 miles
Twin Tank – 1.5 miles (on different side of mountain)
- 6) **Is the target wildlife species a result of transplant efforts?** ___YES ___X___ NO
- 7) **Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument, etc). If private land, list landowner.**
- 8) **Please provide the following information about access to the proposed site:**
Type of access (mark one): ___X___ 2x4 vehicles with high clearance ___4x4 only ___foot only**
**If foot access only: Distance in miles: Approx. hiking time:

-- Does access to this site require crossing private or tribal lands? ___YES ___X___ NO

-- Please describe any restrictions to public access: None
- 9) **Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired.**
2 – 18' diameter Ring Tanks
1 – 3' x 4' Walk-in Trough
1 – Wildlife 3' x 4' Trough
1 – 24' x 96' Apron
Pipe-rail Fence (150x150)
Misc. materials & plumbing
- 10) **Was a site visit completed?** ___X___ Yes ___No
If yes, please list personnel that attended and date.
Joe Currie, Dana McGehee, Tim Holt, Joseph Currie, Shannon Torrence (USFS), Leroy Tucker (ranch manager) June 30, 2009

Existing Pinyon Mountain Catchment and Upper Storage Tank Photo 1



Existing Pinyon Mountain Catchment Photo 2



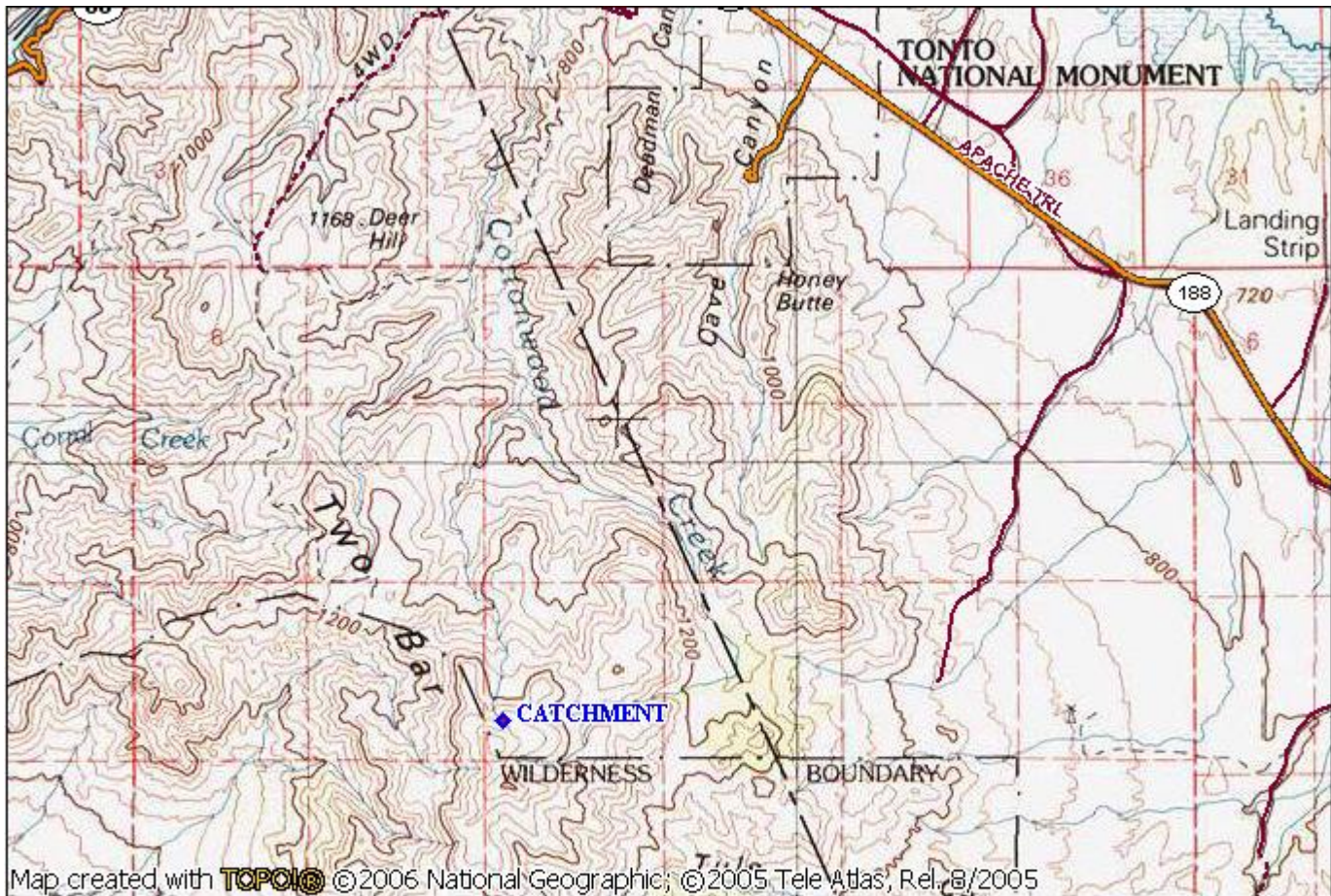
Existing Pinyon Mountain Catchment and Lower Storage Tank Photo 3





Existing Lower Storage Tank and Temporary Livestock Trough

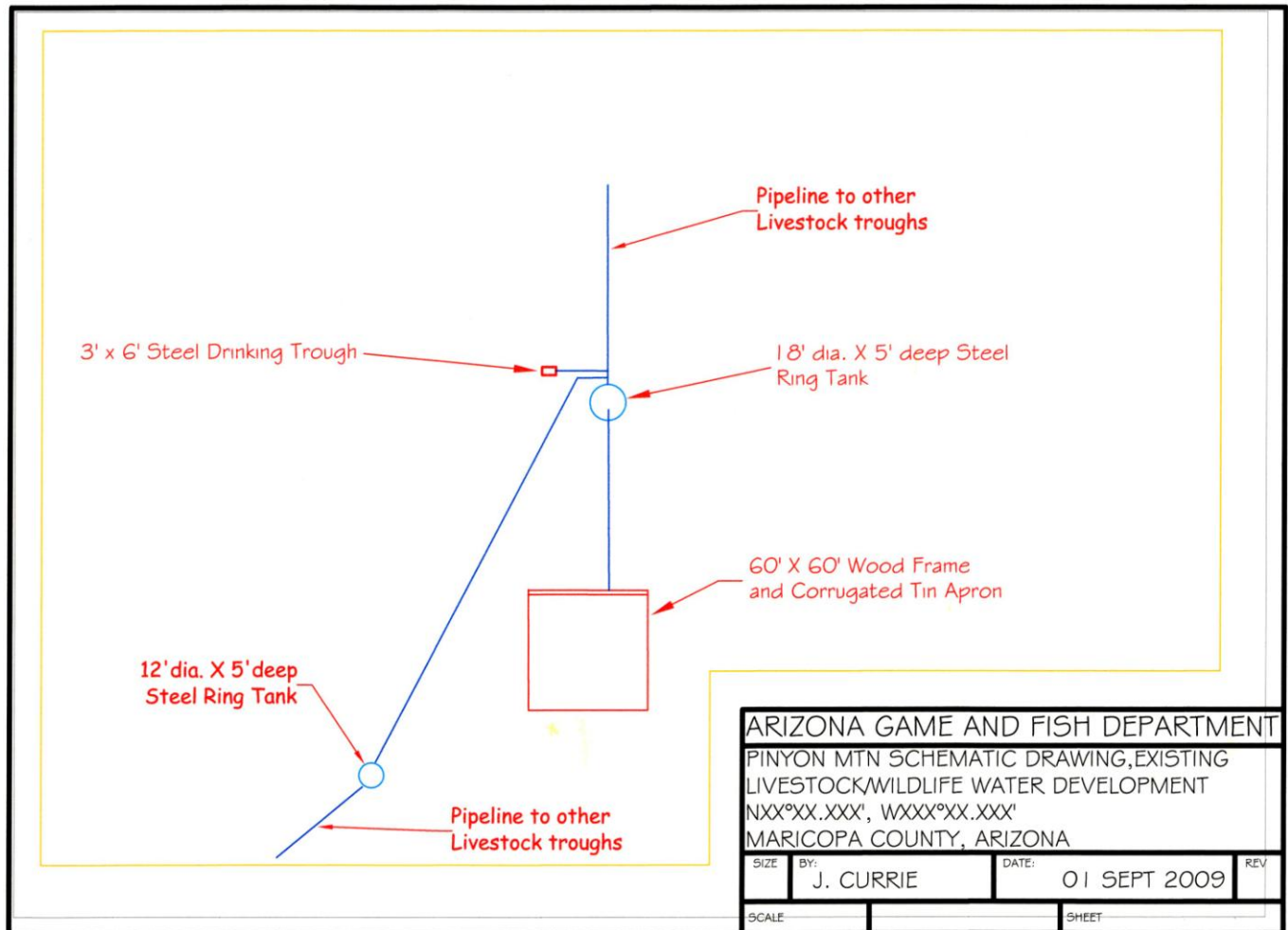
Location of Pinyon Mountain Catchment



0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 miles
0 1 2 3 4 5 km

TN MN
11°
08/31/09

Existing Pinyon Mountain Catchment



Proposed Pinyon Mountain Catchment

